Department : Information Technology	Semester : 6th
Week	Days
Subject: Internet of Things	No.of days/per week class allotted . 4p/week.
Feb 3rd week	1st
	2nd
	3rd
	4th
Feb 4th week	1st
	2nd
	3rd
	4th
March 1st week	1st
	2nd
	3rd
	4th
March 2nd week	1st
	2nd
	3rd
	4th
March 3rd week	1st
	2nd
	3rd
	4th
March 4th week	1st
	2nd
	3rd
	4th
April 1st week	1st
	2nd
	3rd
	4th
	3rd
	4th
April 2nd week	1st
	2nd
	3rd
	4th
	5th

April 3rd week	1st	
	2nd	
	3rd	
	4th	
April 4th week	1st	
	2nd	
	3rd	
	4th	
May 1st week	1st	
	2nd	
	3rd	
	4th	
May 2nd week	1st	
	2nd	
	3rd	
	4th	
May 3rd week	1st	
	2nd	
	3rd	
	4th	
May 4th week	1st	
	2nd	
	3rd	
	4th	

mic Lesson Plan of Summer 2023

Name of the teaching faculty: Madhusmita Dalai
Theory
Semester from : 14th feb2023 to 23rd may 2023

Introduction to Internet of Things
Characteristics of IoT
Applications of IoT
IoT Enablers and connectivity layers
Baseline Technologies,Sensor
Actuator
IoT components and implementation,Challenges for IoT
IOT Networking,Terminologies
Gateway Prefix allotment
Impact of mobility on Addressing
Multihoming
Deviation from regular Web
IoT identification and Data protocols
Connectivity Technologies, Introduction
IEEE 802.15.4,ZigBee, 6LoWPAN
RFID, HART and wireless HART
NFC, Bluetooth, Z wave, ISA100.11.A
Wireless Sensor Networks Introduction,Components of a sensor node
Modes of Detection,Challenges in WSN, Sensor Web
Cooperation and Behaviour of Nodes in WSN,Self Management of WSN
Social sensing WSN,Application of WSN,Wireless Multimedia sensor network
Wireless Nanosensor Networks,Underwater acoustic sensor networks
WSN Coverage,Stationary WSN, Mobile WSN
M2M Communication,M2M Ecosystem
M2M service Platform,Interoperability
Programming with Arduino Features of Arduino,Components of Arduino Board
Arduino IDE,Case Studies
Programming with Raspberry Pi
Architecture and Pin Configuration, Case studies
Implementation of IoT with Raspberry Pi
Software defined Networking,Limitation of current network
Origin of SDN,SDN Architecture
Rule Placement, Open flow Protocol
Controller placement
Security in SDN,Integrating SDN in IoT

Smart Homes,Origin and example of Smart Home Technologies
Smart Home Implementation,Home Area Networks(HAN)
Smart Home benefits and issues
Smart Home benefits and issues
REVISION
Smart Cities,Characteristics of Smart Cities
REVISION
Smart city Frameworks,Challenges in Smart cities
Smart city Frameworks,Challenges in Smart cities
REVISION
Data Fusion,Smart Parking
Energy Management in Smart cities
Industrial IoT
REVISION
IIoT requirements
Design considerations
Design considerations
Benefits of IIoT
REVISION
Challenges of IIoT
REVISION
REVISION
REVISION
REVISION

Signature of the Faculty